

### **REMARKS**

In the Final Office Action dated January 03, 2007, the Examiner noted that claims 1-10 are pending in the application and that claims 1-10 stand rejected. By this response claims 9 and 10 have been cancelled and claims 1, 2, 4 and 7 have been amended to more clearly define the invention of the Applicant.

In view of the amendments presented above and the following discussion, the Applicant respectfully submits that none of the claims are anticipated under the provisions of 35 U.S.C. § 102 or rendered obvious under the provisions of 35 U.S.C. § 103. Thus the Applicant believes that all of these claims and the application are now in allowable form.

#### **Rejections**

##### **A. 35 U.S.C. § 102**

The Examiner rejected claims 1-2, 5 and 7-10 under 35 U.S.C. § 102(e) as being anticipated by Isaka (U.S. Patent No. 5,706,388). The rejection is respectfully traversed.

Regarding claim 1, the Examiner alleges that Isaka discloses a process for recording a digital video and audio data stream wherein recording being carried out on a medium organized in the form of logic blocks in series and comprising a recording and reading head including all of the aspects of the Applicant's invention. The Applicant respectfully disagrees.

"Anticipation requires the presence in a single prior art reference disclosure of each and every element of the claimed invention, arranged as in the claim" (Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick Co., 730 F.2d 1452, 221 USPQ 481, 485 (Fed. Cir. 1983)). (emphasis added). The Applicant respectfully submits that Isaka fails to teach each and every element of at least the Applicant's amended claim 1, which specifically recites:

"A process for recording a digital video and audio data stream wherein recording being carried out on a medium organized in the form of logic blocks in series and comprising a recording and reading head, said process comprising the steps of:

recording data on said medium as **an interleaved** pattern of at least one recorded block immediately followed by at least one unrecorded block; and

following the triggering of the reading of the recorded data, alternately reading a continuous series of said previously recorded blocks and continuing the recording of data in said unrecorded blocks **which are interleaved with** the blocks being read. (emphasis added)

The amendment to the Applicant's claim 1 finds support throughout the specification and specifically on page 18, lines 6-21 and in FIGs 9a and 9b. More specifically, Claim 1 is directed to a process for recording a digital video and audio data stream wherein recording being carried out on a medium (hard disk 201 on page 5, line 23) organized in the form of logic blocks in series and comprising a recording and reading head, the process including the steps of recording data in an interleaved pattern of at least one recorded block immediately followed by at least one unrecorded block (see figure 9a, page 18 lines 10-13) and following the triggering of the reading of the data, alternately reading a continuous series of previously recorded blocks and continuing the recording of data in the unrecorded blocks which are interleaved with the blocks being read (see page 18 lines 14-21).

In contrast to the invention of the Applicant, at least as claimed by the Applicant's independent claim 1, Isaka teaches (see column 4 lines 53-57) that "the data is recorded in consecutive areas on the recording medium 6a in the receiving order". Such teachings in Isaka are in direct contrast to at least the Applicant's claim 1 in which the data is recorded as an interleaved pattern of at least one recorded block immediately followed by at least one unrecorded block. Therefore the data is not recorded in the receiving order, as the blocks unrecorded are recorded later and are thus interlaced with data previously recorded.

In contrast to the invention of the Applicant, in Isaka, the data is not interleaved which is also clearly mentioned on column 6 lines 6-24 of Isaka. That is, in Isaka the data is recorded in successive blocks. Nothing in Isaka indicates that the data is recorded in one block, then one block is left free, then another block is recorded and so on, as taught in the Applicant's Specification and claimed by at least the Applicant's amended claim 1. Instead, Isaka teaches in column 6 lines 13-15 that in block 1 is recorded the first predetermined amount of data and in block n is recorded the nth predetermined amount of data. This clearly teaches

that in Isaka the data is stored without leaving at least one free block unrecorded between two recorded blocks to form an interleaved pattern as taught and claimed by the Applicant.

More specifically, in one embodiment of the invention of the Applicant, a first predetermined amount of data is recorded in block 1, a second predetermined amount of data is recorded in block 3, and in block  $(2n-1)$  is recorded the  $n$ th predetermined amount of data. As such, in the invention of the Applicant one adjacent block is left unrecorded after recording one block of incoming data. In the case where one recorded block is followed immediately by more than one unrecorded block, the  $n$ th amount of data is stored not in block  $(2n-1)$  but in a block of greater number than  $2n-1$ .

In figure 3 of Isaka as pointed out by the Examiner, it is clearly taught that data is recorded in contiguous blocks, see blocks  $n$ ,  $n+1$ ,  $n+2$ . There is not one recorded block immediately followed by one unrecorded block to form an interleaved pattern as taught in the Applicant's Specification and claimed by at least the Applicant's amended claim 1. This is in direct contrast to the invention of the Applicant (i.e., see figures 9a and 9b of Applicant's invention where it is clearly shown that one recorded block is followed by at least one adjacent unrecorded block, the blocks being written one block over two or over three but not one block after the other without leaving at least one free adjacent block between each recorded block to form an interleaved pattern).

Regarding the reproducing mode, Isaka teaches that the data is read on the recording medium and transferred either in buffer 10 or 11. Isaka further teaches in column 5 lines 24-35 that "at the same time the recording/reproducing head is returned to the last recording position to continue the recording operation for the data supplied from either of the reception buffer memories 1 and 2. When the predetermined amount of data is recorded on the recording medium 6a, the recording/reproducing head is again moved to the last reproducing position to reproduce the predetermined amount of data similarly to the above mentioned manner". Therefore, it is clear that in Isaka the recording/reproducing head moves from a reproducing position to a recording position, whereas in our invention, the recording/reproducing head does not need to jump from the recording position to

the reproducing position as data is read and recorded from adjacent blocks forming an interleaved pattern of recorded blocks and unrecorded blocks which therefore does not require moving the head from one position to a non-continuous position. As such, the invention of the Applicant has a clear and distinct advantage over the invention taught and claimed in Isaka.

Even further, the Applicant respectfully submits that the abstract of Isaka as cited by the Examiner also absolutely fails to teach each and every aspect of the Applicant's claim 1. More specifically, the Applicant does not agree that the abstract discloses a recording system where recording of information currently received can be performed while displaying of data previously recorded as taught and claimed by the Applicant. That is the Applicant submits that the abstract of Isaka does not teach, suggest or anticipate at least how the blocks are recorded and read on the recording medium in an interleaved pattern as taught in the Applicant's Specification and as claimed in at least the Applicant's claim 1.

Therefore, the Applicant submits that for at least the reasons recited above, independent claim 1 is not anticipated by the teachings of Isaka and, as such, fully satisfies the requirements of 35 U.S.C. § 102 and is patentable thereunder.

Likewise, independent claim 7 recites similar relevant features as recited in the Applicant's independent claim 1. As such, the Applicant respectfully submits that for at least the reasons recited above independent claim 7 is also not anticipated by the teachings of Isaka and also fully satisfies the requirements of 35 U.S.C. § 102 and is patentable thereunder.

Furthermore, dependent claims 2, 5 and 8-10 depend either directly or indirectly from independent claims 1 and 7 and recite additional features therefor. As such and for at least the reasons set forth herein, the Applicant submits that dependent claims 2, 5 and 8-10 are also not anticipated by the teachings of Isaka. Therefore the Applicant submits that dependent claims 2, 5 and 8-10 also fully satisfy the requirements of 35 U.S.C. § 102 and are patentable thereunder.

**B. 35 U.S.C. § 103**

The Examiner rejected claims 3-4 under 35 U.S.C. § 103(a) as being unpatentable over Isaka in view of Official Notice. The rejection is respectfully traversed.

The Examiner applied Isaka for the rejection of claims 3-4 as applied above for the rejection of claims 1 and 7. As described above, Isaka absolutely fails to teach, suggest or anticipate at least the Applicant's independent claims 1 and 7. As such, and at least because Isaka fails to teach, suggest or anticipate the Applicant's independent claims 1 and 7, the Applicant further submits that Isaka also fails to teach, suggest or anticipate the Applicant's claims 3-4, which depend directly from the Applicant's claims 1 and 7, respectively.

As such and for at least the reasons recited above, the Applicant respectfully submits that the teachings of Isaka and Official Notice fail to teach, suggest or make obvious the invention of the Applicant with regard to at least the Applicant's independent claims 1 and 7. As such, the Applicant further submits that the teachings of Isaka and the Official Notice also fail to teach, suggest or make obvious the invention of the Applicant with regard to dependent claims 3 and 4, which depend directly from the Applicant's independent claim 1 and recite further limitations thereof.

Therefore, the Applicant submits that for at least the reasons recited above, the Applicant's claims 3 and 4 are not rendered obvious by the teachings of Isaka and the Official Notice and, as such, fully satisfy the requirements of 35 U.S.C. § 103 and are patentable thereunder.

**C. 35 U.S.C. § 103**

The Examiner rejected claim 6 under 35 U.S.C. § 103(a) as being unpatentable over Isaka in view of Ogawa (U.S. Patent No. 6,115,799). The rejection is respectfully traversed.

The Examiner applied Isaka for the rejection of claim 6 as applied above for the rejection of claim 1. As described above, Isaka absolutely fails to teach, suggest or anticipate at least the Applicant's independent claim 1. As such, and at least because Isaka fails to teach, suggest or anticipate the Applicant's

independent claim 1, the Applicant further submits that Isaka also fails to teach, suggest or anticipate the Applicant's claim 6, which depend directly from the Applicant's claim 1.

Furthermore, the Applicant submits that Ogawa also fails to teach, suggest or render obvious at least "recording data on said medium as **an interleaved** pattern of at least one recorded block immediately followed by at least one unrecorded block; and following the triggering of the reading of the recorded data, alternately reading a continuous series of said previously recorded blocks and continuing the recording of data in said unrecorded blocks **which are interleaved with the blocks being read**" as taught in the Applicant's Specification and claimed by at least the Applicant's independent claim 1. That is, the teachings of Ogawa absolutely fail to bridge the substantial gap between the invention of Isaka and the invention of the Applicant.

More specifically Ogawa teaches an information processing apparatus, which can expand a part of a function by the addition of software. The invention of Ogawa enables the development of additional software that does not depend on the firmware version. The information processing apparatus of Ogawa manages a memory using, for example, a Next Fit method and may reduce memory fragmentation. A reduction in memory fragmentation may be performed before and after a photograph is taken in a camera using a flash memory, or before or after recording or erasing is performed. However, the Applicant submits that there is absolutely no teaching, suggestion or disclosure in Ogawa for a process for recording a digital video and audio data stream in which recording is being carried out on a medium organized in the form of logic blocks in series and including a recording and reading head where the process includes "recording data on said medium as **an interleaved** pattern of at least one recorded block immediately followed by at least one unrecorded block; and following the triggering of the reading of the recorded data, alternately reading a continuous series of said previously recorded blocks and continuing the recording of data in said unrecorded blocks **which are interleaved with the blocks being read**" as taught in the Applicant's Specification and claimed by at least the Applicant's claim 1.

As such, the Applicant submits that at least because Ogawa fails to teach, suggest or render obvious at least the Applicant's independent claim 1, the Applicant further respectfully submits that Ogawa also fails to teach, suggest or render obvious the Applicant's claim 6, which depends directly from the Applicant's independent claim 1.

Furthermore, the Applicant submits that there is absolutely no motivation or suggestion in either reference for the combination of Isaka and Ogawa to attempt to teach the invention of the Applicant. More specifically, there is no motivation or suggestion in the invention of Ogawa for the combination of the references and likewise, the invention of Isaka does not expressly or impliedly motivate or suggest such a combination as required by for the combination of references under 35 U.S.C. § 103.

Even further, the Applicant submits that even if there was a motivation to combine the references (which the Applicant maintains that no such motivation exists), the teachings of Ogawa fail to bridge the substantial gap between the teachings of Isaka and the Applicant's invention at least with respect to independent claim 1 and as such dependent claim 6.

As such and for at least the reasons recited above, the Applicant respectfully submits that the teachings of Isaka and Ogawa, alone or in any allowable combination, fail to teach, suggest or make obvious the invention of the Applicant with regard to at least the Applicant's independent claim 1. As such, the Applicant further submits that the teachings of Isaka and Ogawa, alone or in any allowable combination, also fail to teach, suggest or make obvious the invention of the Applicant with regard to dependent claim 6, which depends directly from the Applicant's independent claim 1, and recites further limitations thereof.

Therefore, the Applicant submits that for at least the reasons recited above, the Applicant's claim 6 is not rendered obvious by the teachings of Isaka and Ogawa, alone or in any allowable combination and, as such, fully satisfy the requirements of 35 U.S.C. § 103 and are patentable thereunder.

Conclusion

The Applicant respectfully submits that none of the claims are anticipated under the provisions of 35 U.S.C. § 102 or rendered obvious under the provisions of 35 U.S.C. § 103. Consequently, the Applicant believes that all these claims are presently in condition for allowance. Accordingly, both reconsideration of this application and its swift passage to issue are earnestly solicited.

If however, the Examiner believes that there are any unresolved issues requiring adverse final action in any of the claims now pending in the application, or if the Examiner believes a telephone interview would expedite the prosecution of the subject application to completion, it is respectfully requested that the Examiner telephone the undersigned.

Please charge the \$810 fee for the RCE and any other costs that may be due to Deposit Account No. 07-0832.

Respectfully submitted,  
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